

What Is Claimed Is:

1. A gas laser oscillation device, comprising a plurality of discharge sections that are respectively provided with electrodes for discharge and a plurality of power sources for discharge excitation that supply discharge power to the discharge sections and are respectively connected with the electrodes of the plurality of discharge sections,

wherein said plurality of discharge sections include at least two discharge sections in which mutually different beam modes are excited when respective independent discharges are produced; and

of said plurality of power sources for discharge excitation, the power sources for discharge excitation that supply discharge power to at least two discharge sections can adjust the distribution of the amount of discharge power supplied to these at least two discharge sections.

2. The gas laser oscillation device according to claim 1 wherein, in the combination of said discharge sections, the electrodes that are respectively provided in the discharge sections differ in regard to at least one of dimensions, shape or construction.

3. The gas laser oscillation device according to claim 1 wherein, in the combination of said discharge sections, the discharge sections differ in regard to at least one of dimensions or shape.